

REMARKS

This amendment submitted in response to the final Office Action dated June 11, 2007, is believed to be fully responsive to the points of rejection raised therein. The amendments to the claims presented above are intended to clarify the claims, and entry of the Amendment is respectfully requested.

Claims 1 and 5 are amended above. Upon entry of the amendments, claims 1-24 will be pending in the present patent application. Applicants respectfully request reconsideration and allowance of all pending claims in light of the above amendments and the following remarks offered in response to the Office Action.

Claims 1-24 were rejected under 35 U.S.C 103(a) as being unpatentable over U.S Patent No. 5,018,069 (hereinafter "Pettigrew") in view of U.S Patent No. 5,727,128 (hereinafter "Morrison").

Applicants maintain their position that the pending claims are patentable over the cited references for the reasons cited in their amendment dated March 29, 2007. Regarding the Examiner's comments on page 3 of the Office Action, Applicants respectfully submit that their earlier remarks presented in the previous amendment complied with all the requirements of 37 CFR 1.111(b) in that the amendment specifically addressed each of the rejections made in the Office Action by the Examiner. With regard to the Examiner's comments on page 3, line 13 of the Office Action, that the Applicants were merely reciting piece meal, the sections of Pettigrew, Applicants further submit that these sections of Pettigrew were cited because Applicants believe that Pettigrew does not teach or disclose the claimed limitations that the Examiner contends is being taught or disclosed in Pettigrew. In particular, with respect to the Examiner's comments beginning on line 21, of page 3 and continuing to line 10 of page 4, Applicants respectfully re-affirm their argument stated in the previous amendment.

Specifically, and as recited in independent claims 1, 5, 9, 13, 17 and 21, the cited references do not teach or disclose at least a system and method for *quantifying baseline model quality* comprising a model diagnostics component to *evaluate the performance of an engine baseline model*. In addition, and as recited in independent claims 1, 9 and 17, the cited references do not teach or disclose a system and method that includes a model diagnostics component that calculates, for each identified correlation, summary statistics relating to the degree of correlation, wherein the model diagnostics component is further configured to use the summary statistics to evaluate the performance of the engine baseline model. Further, and as recited in independent claims 5, 13 and 21, the cited references do not teach or disclose a system and method that includes a model diagnostics component that computes residual errors for each point, wherein the model diagnostics component is further configured to use the residual errors to evaluate the performance of the engine baseline model.

Further, with regard to the section, col. 11, lines 39-56, in Pettigrew, referenced by the Examiner in page 4, line 7 of the office action, Applicants respectfully submit that this section merely discloses that based on the referred engine diagnostic data (REDD) values obtained, a decision to fly may periodically be re-evaluated in light of the trends of the deviation of the REDD values from the baseline over time. Accordingly, and as stated in the previous amendment, the REDD values are merely used to determine the extent of deviation between the calculated performance function and the standard baseline. In other words, Pettigrew appears only to disclose a technique for determining the *extent of engine deterioration* by measuring the degree of deviation between various turbine engine performance parameters and actual engine parameter curves.

In contrast, the present patent application discloses a system and method for *quantifying baseline model quality* and *evaluating the performance of an engine baseline model* by analyzing generated engine trends for the presence of correlations to various engine, aircraft, or environmental parameters. See, e.g., Application, paragraph [0050], lines 6-7 on page 18. Specifically, and in one embodiment, the quality of the generated baseline model is determined by identifying correlations between engine trends and various

parameters, and for each identified correlation, summary statistics relating to the degree of correlation are calculated, wherein the summary statistics of the correlations are used to evaluate the relative goodness of the generated baseline models. See, e.g., Application, paragraph [0051], lines 15-16 on page 18 and paragraph [0051], lines 1-2, on page 19. Further, and in another embodiment, data points representative of engine trends are generated and plotted over time. Residual errors computed for each trend point are used to evaluate the performance of the engine baseline model. See, e.g., Application, paragraphs [0053] and [0054].

Further, and with regard to the Examiner's comments and citation of the MPEP section 2111.4 on page 6, line 17 and continuing to page 7, line 4 of the office action, Applicants have amended claims 1 and 5 to clarify that the model diagnostics component is configured to use the summary statistics to evaluate the performance of the engine baseline model. Applicants respectfully submit that contrary to the Examiner's assertion, this recitation is not a mere expression of the intended result of a process step. On the contrary, this recitation is an integral part of the claimed invention. The Examiner cites MPEP 2111.4 to support his position. MPEP 2111.4 cites two recent cases from the Court of Appeals for the Federal Circuit (CAFC), *Menton v. NASDQ, Inc.*, 336 F.3d 1373 (Fed. Cir. 2003) and *Hoffer v. Microsoft Corp.*, F.3d 1326,1329, 74 USPQ2d 1481 (Fed. Cir. 2005).

Applicants note that the whereby clause at issue in *Menton* was qualitatively different from the claim recitation at issue here. In *Menton*, the court affirmed the district court's construction of the following whereby clause:

whereby the security is traded efficiently between the first individual
and the second individual,

“as merely expressing the intended result of a processing step positively recited.” As such, the court did not give weight to the “trading efficiently phrase.”

Applicants respectfully submit that the claim recitation at issue here is qualitatively similar to that at issue in *Hoffer*. In *Hoffer*, the court affirmed the construction of the following whereby clause:

whereby a trade network supports users at said plurality of RUTs, who are each guided by said IAPI to select an economic activity, to identify that index topic that corresponds to said activity, to enter that topic board dedicated to said topic, and who are collectively able to concurrently engage in interactive data messaging on said topic boards

by the district court to require interactive data messaging. In so doing, the court noted that “[t]his capability is more than the intended result of a process step; it is part of the process step itself.” Accordingly, Applicants respectfully submit that the claim recitation “the model diagnostics component is configured to use the summary statistics to evaluate the performance of the engine baseline model” should be given patentable weight. Further, Applicants respectfully submit that this recitation is not taught by the cited art.

In view of the above-noted distinctions, Applicants submit that claims 1, 5, 9, 13, 17 and 21 are neither the same as, nor in any way taught or suggested by Pettigrew or Morrison taken either singly or in combination. In view of the foregoing deficiencies in the teachings of the prior art, the references cannot establish a *prima facie* case of obviousness of claims 1, 5, 9, 13, 17 and 21. Accordingly, these claims are believed to be clearly patentable over the cited combination as well as other prior art of record. Their reconsideration and allowance is respectfully requested. Dependent claims 2-4, 6-8, 10-12, 14-16, 18-20 and 22-24 depend from presumably allowable independent claims 1, 5, 9, 13, 17 and 21. Accordingly, these claims are believed to be clearly patentable over the cited combination. Their reconsideration and allowance is requested.

In view of the remarks and amendments set forth above, Applicants respectfully request allowance of the pending claims.

CONCLUSION

In view of the foregoing, Applicants respectfully submit that the application is in condition for allowance. Favorable reconsideration and prompt allowance of the application are respectfully requested.

Please charge all applicable fees associated with the submittal of this Amendment and any other fees applicable to this application to the Assignee's Deposit Account No. 07-0868.

Should the Examiner believe that anything further is needed to place the application in even better condition for allowance, the Examiner is requested to contact Applicants' undersigned representative at the telephone number below.

Respectfully submitted,

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